



Geon™ Vinyl Fittings M1210

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active ¹		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Impact Resistance	• Medium Flow	
Uses	• Fittings		
Agency Ratings	• NSF 14	• NSF 61	• NSF Type II ²
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ³

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.38	1.38	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ⁴	360000 psi	2480 MPa	ASTM D638
Tensile Strength ⁴ (Yield)	6200 psi	42.7 MPa	ASTM D638
Flexural Modulus	403000 psi	2780 MPa	ASTM D790
Flexural Strength	10800 psi	74.5 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
32°F (0°C), 0.125 in (3.18 mm), Injection Molded	2.0 ft·lb/in	110 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	20 ft·lb/in	1100 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	107	107	ASTM D785
Durometer Hardness (Shore D)	81	81	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	160 °F	71.1 °C	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.0591 in (1.50 mm), WT)	V-0	V-0	UL 94

Additional Information

NSF - Cell Classification D1784 (NSF Listed) -- 14333 / NSF - Cell Classification D1784 (Capable) -- 14334

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	390 to 410 °F	199 to 210 °C

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Notes

¹ RoHS compliant.

² NSF Agency ratings are based on tested and certified colors. Please contact PolyOne technical for further information.

³ Typical values are not to be construed as specifications.

⁴ Type I, 2.0 in/min (51 mm/min)

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